

# Do TJ policies cause backlash?

## Evidence from street name changes in Spain

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June 15, 2021

### Abstract

Memories of old conflicts shape domestic politics long after these conflicts end. Contemporary debates about the Confederacy in the United States or the Francoist regime in Spain suggest that these are sensitive topics that might increase political polarization, particularly when transitional justice policies are implemented to address grievances and political parties mobilize grudges around these policies. One such policy recently debated in Spain is the removal of public symbols linked to a past civil war and subsequent authoritarian regime (i.e., Francoism). However, the empirical evidence on their impact is still limited. This article attempts to fill this gap by exploring the impact of street's renaming. Using difference-in-differences analyses, we show that the removal of Francoist street names has contributed to an increase of electoral support for a new far-right party, Vox, mostly at the expense of a traditional right-wing conservative party, PP. Results suggest that revisiting the past and trying to redress the victims' grievances can cause a backlash among those ideologically aligned with the perpetrator, and that this can be capitalized by political parties.

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## Introduction

Memories of contested historical events shape domestic politics across the world. One way in which historical memory is formed and reproduced is through symbols such as statues or street names, and their establishment (or removal) constitutes a policy that is often related to Transitional Justice (TJ) processes in societies coming out from authoritarian or conflicted pasts. These forms of “symbolic TJ policies” are considered important to facilitate national reconciliation.

Yet, the policy of symbol removals is not free of controversy. In Ukraine, the removal of Soviet statues during the ‘Leninopad’ has generated backlash among sympathizers of the former authoritarian regime ([Rozenas and Vlasenko, 2021](#)). In the South of the United States, there have been several instances of right-wing or white supremacist protests when statues of Confederates have been torn down, and there is a heated policy and scholarly debate about whether these statues should remain in public spaces or not ([Grossman, 2016](#)).

In this article, we ask if TJ symbolic policies cause backlash. If yes, what are the political consequences of such backlash? If individuals feel aggrieved about symbols of a given past regime being removed, this can be used by social movements or political parties to build further support. In this article, we explore a potential backlash effect of the removal of public symbols linked to the Francoist regime in Spain, where memories of the Civil War (1936–1939) and the subsequent dictatorship are divisive and potentially polarizing ([Balcells, 2012](#)). Our design exploits some of the changes brought about in Spain by the 2007 Law of Historical Memory, which introduced a mandate to remove Francoist symbols from public spaces, including street names. We examine whether streets’ renaming generated an increase in electoral support for Vox, a relatively new far-right party.

While traditional conservative parties in Spain have been generally opposed to TJ policies promoted by left-wing governments and have been adamant to stick to the ‘pact of forgetting’ that characterized the transition to democracy in the late 1970s (e.g. [Fuente, 1980](#)), the far-right was more resolute in whitewashing the Francoist regime and defending the preservation of its memory. In response to recent TJ policies, Vox has fiercely

tried to capitalize discontentment among Spaniards who do not support such policies.<sup>1</sup> For example, they have been vocally opposed to Francoist symbols removed from public spaces, or to the removal of Francisco Franco's remains from the Valley of the Fallen's mausoleum ([Taladrid, 2019](#)).<sup>2</sup> Yet, we do not know whether this strategy has electorally benefited this far-right party or not, and identifying causality is thorny because of counterfounding events. For example, in the 2017 secessionist crisis in Catalonia, Vox has been actively involved in the judicial prosecution of secessionist leaders, and has attempted to mount as true guarantor's of Spanish territorial unity.

In this study, we implement a difference-in-differences (DiD) design where we analyze the impact of Francoist street name removals on the growth of Vox electoral support between June 2016 and April 2019. We find that electoral support for Vox increased around 6% more in municipalities where there was a removal of Francoist street names between June 2016 and April 2019 than in places without such removals. Support for the Partido Popular (PP) decreased 8% more in those same municipalities, while support for the socialist party (PSOE) did not vary, suggesting a potential link to increased asymmetric polarization by which there is increased radicalization only in one sector of society (in this case, the right).

## The effects of “symbolic” TJ policies

After regime transitions or violent episodes, countries face the need to come to terms with the past ([Elster, 2004](#)). To this end, countries often rely on different TJ policies, such as trials, truth commissions, reparations, amnesties, or “symbolic” measures (i.e., museums, memorials) ([De Brito et al., 2001; Elster, 2004; Balasco, 2013](#)). All these diverse measures aim to serve justice, redress grievances, and reduce the probability of conflict recurrence ([Loyle and Appel, 2017](#)). However, the short-term and long-term and consequences of TJ policies are still not clear.

Many scholars praise TJ policies, arguing that they increase the prospect for democracy ([Elster, 2004; Sikkink and Walling, 2007](#)) and reduce the risk of future conflict by

increasing accountability for past victimization (Kim and Sikkink, 2010; Meernik et al., 2010), and redressing grievances (Akhavan, 1998; Loyle and Appel, 2017).

Other authors argue that the positive view on TJ policies is overly optimistic, and that there is scant evidence supporting their beneficial effect (Mendeloff, 2004; Thoms et al., 2010). Some even claim that TJ policies can have a negative effect on reconciliation and conflict because they can renew social tensions in divided societies (Snyder and Ninja-muri, 2004).

Trying to shed light on this debate, Capoccia and Pop-Eleches (2020) study the effects of TJ trials on prodemocratic attitudes in West Germany, and find heterogenous effects depending on the type of punishment and the ethnic identity of the defendants. Balcells et al. (2020), for their part, study the impact of TJ museums with a RCT in Santiago, Chile. They find a single TJ museum visit can have reconciliatory and prodemocracy effects among visitors, and document no evidence of a backlash among those ideologically close to the Pinochet regime.

We contribute to this debate by exploring the effects of a particular subset of TJ policies: the removal of symbols from public spaces. In particular, we focus on the removal of Francoist street names in Spain. Street renaming, just like the removal of statues and other symbols or the building of museums and establishment of historical markers (Ward, 2021), are a form of what Aguilar et al. (2011) call “symbolic Transitional Justice”. Symbolic TJ is very much intertwined with the politics of memory, which involve “the shaping of collective memory by political actors and institutions” (Zubrzycki and Woźny, 2020, 176). While there has been significant research on other aspects of TJ policies such as trials, reparations, or lustration (Nalepa, 2010; Loyle and Appel, 2017; Voytas, 2021), the study of symbolic TJ is still quite underdeveloped.

In Spain, the Law of Historical Memory (2007), promoted by a left-wing (PSOE) government, constituted an attempt to redress long-held grievances by the victims of the civil war and the Francoist regime. Among other things, it included provisions for the removal of Francoist symbols from public spaces, such as street names and monuments. Some local governments had already changed Francoist street names right after the transition to democracy. Still, these changes depended on an active decision made at the local

level. In hundreds of municipalities, either because the historical memory issue was less salient or because local politicians actively rejected the change, many streets were still named after Francoist symbols or leaders. The 2007 Law prompted local governments to be proactive and offered local associations a legal platform to pressure their local councils to remove these symbols. Anecdotally, we know that these policies generated some backlash among right-wingers, but we do not know if this backlash was systematic, and the extent to which it benefited the far-right, which tried to exploit it electorally. We test this hypothesis with granular data from Spanish municipalities.

## Empirics

We implement a DiD design analyzing the effect of Francoist street name removals on the growth of local electoral support for Vox between June 2016 and April 2019 elections. We focus on this time period for two reasons. First, given that Vox first participated in national elections in December 2015, the 2016–2019 period is the only electoral period longer than six months in which it is possible to see changes in support for Vox. And second, it was precisely during this period when Vox experienced a growth in support that let the party become one of the key electoral players in Spain.

Limiting the sample to all municipalities that still had at least one street with a Francoist name in June 2016, our main models aim to identify whether Vox grew more in municipalities that removed Francoist street names.

### *Francoist street name removal*

To build our main independent variable, we use data from the Spanish National Statistical Institute ([INE, 2020](#)) identifying all the streets in Spain at different points in time. The INE offers data on all existing streets on June 30th and December 31st every year since late 2010.<sup>3</sup> Using the official ID number for each street, we track name changes over time.

We then identify streets names after Francoist symbols or figures. We use the list published by the Madrid City Council in 2017, following a report by a specially designated commission,<sup>4</sup> and manually expanded it by selecting Francoist names among the most

frequent changes (e.g., ‘José Antonio’, ‘Calvo Sotelo’, ‘Generalísimo’, ‘General Franco’). We show the full list in the Appendix (section A1). Our main variable is a binary indicator of Francoist street name removal between June 30th, 2016 and December 31st, 2019.<sup>5</sup>

Figure 1 shows the number of Francoist street name removals during every six-month period since 2011. There is a spike after 2016, precisely the period we study. The main reason behind this increase is that, at the local level, the different legal battles or lobbying campaigns to remove Francoist names took time. In mid-2016, Olmedo, Valladolid, was the first municipality to be sentenced for not complying with the 2007 LHM ([El Norte de Castilla, 2016](#)). Around the same time, many municipalities began facing trials after being sued by local historical memory associations. Moreover, after 2015, there was an increased institutional activity in favor of street renaming, partly as a result of the PP losing grip of a number of municipal and regional governments in the 2015 elections (e.g. [Vázquez, 2016](#); [El Comercio, 2016](#)).

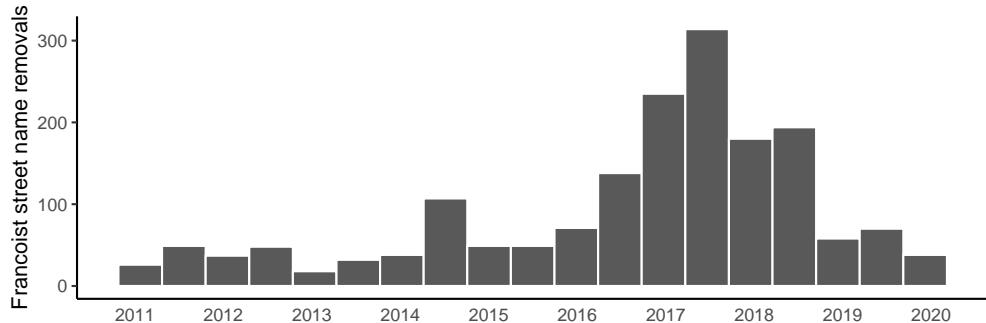


Figure 1: Number of Francoist street name removals over time (2011-2020)

The post-2016 increase could bias the results if it was related to political dynamics that also explain the change in political preferences. However, the data suggests this is not the case. We discuss this issue more in depth below and in the Appendix (section A5).

#### *Vox electoral support*

We exploit support for Vox as our main dependent variable. We obtained the data from the Spanish Ministry of Interior,<sup>6</sup> and calculated the share of valid votes for Vox in each municipality.

In addition, we also use as dependent variables the electoral share for the two mainstream parties, the right-wing Popular Party (*Partido Popular*, PP) and the Spanish Socialist Workers' Party (*Partido Socialista Obrero Español*, PSOE), in order to capture the local shift in political preferences.

### *Control variables*

We include a series of control variables at the local level that can be related to the increase in electoral support for Vox. In particular, we include turnout in April 2019 elections, (logged) population in the 2011 census, the (logged) number of Francoist street names in June 2016, the unemployment rate in January 2016, and a binary indicator of whether a leftist mayor was elected in the May 2015 local elections. In addition, we also include fixed effects at the region level (Autonomous Communities). We show summary statistics in the Appendix (section A2).

### *Models*

We run OLS regression on the electoral support for Vox, PP, and PSOE in June 2016 and April 2019 elections as the dependent variable, and an indicator of street name removal between June 2016 and December 2018 as our main independent variable. The model is defined as

$$\begin{aligned} Share_{it} = & \beta_0 + \beta_1 Removal_{it} + \beta_2 April2019_{it} + \\ & \beta_3 (Removal_{it} \times April2019_{it}) + \beta^\top \mathbf{x}_{it} + \alpha_{it} + \epsilon_{it} \end{aligned} \tag{1}$$

Where  $\mathbf{x}_{it}$  is a vector of covariates,  $\alpha_{it}$  are region fixed effects, and  $\epsilon_{it}$  is the error term. The effect of street name removals is captured by  $\beta_3$ , the interaction between the  $t_1$  (April 2019) and treatment (name removal) variables.

As explained above, we only include in the sample municipalities that still had Francoist street names in June 2016. Table 1 classifies the municipalities in the sample, and how many of them are in the control and treatment conditions. In addition, in order to

use the same sample across the models for each party, we exclude from the sample municipalities where Vox did not participate in June 2016 elections, which leaves us with a total of 1169 municipalities. We include detailed information about these groups in the Appendix (sections A2–A5), as well as models for PP and PSOE using the full sample (section A7).

Table 1: Sample classification

Francoist names in June 2016?	Removed Francoist names, 2016–2018?	
	No	Yes
No	6455 (100%)	0 (0%)
Yes	1184 (72%)	454 (28%)

*Note:* Row percentages. Changes in 2016–2018 refer to the period between 30/06/2016 and 31/12/2018.

Limiting the sample implies that the control group—those municipalities that did not change street names during this period—is probably more rightist than the average (compared to municipalities out of the sample), as more leftist municipalities are more likely to have already changed Francoist street names before 2016. Indeed, some municipalities that still had not changed Francoist names by late 2018 were portrayed as the ‘resistance’ to the Law of Historical Memory ([Blanco Elipe, 2018](#)), as they actively avoided doing so. This dodging of the Law was possible either because of delays in the legal procedures or some form of ‘foot-dragging’ by local authorities. Because of this, the selection bias should go against our hypothesis, in the sense that the control group is comprised by municipalities where Vox is likely to have grown more between 2016 and 2019. We provide further empirical evidence on this in the Appendix (section A5), including a test of the parallel trends assumption (section A7).

## Results

Table 2 shows the mean electoral share for each of the three parties in 2016 and 2019 elections, for the treated and control groups. We also show the base difference in differences.

Table 2: Mean electoral share in sample

Party	June 2016			April 2019			$\Delta_{2019} - \Delta_{2016}$
	Control	Treated	$\Delta$	Control	Treated	$\Delta$	
Vox	0.21	0.21	0	12.54	13.28	0.74	0.74
PP	41.22	46.77	5.55	23.83	27.68	3.85	-1.7
PSOE	29.13	28.01	-1.12	33.38	32.03	-1.35	-0.23

Table 3 shows the results of the DiD analyses. In order to see the results more clearly, figure 2 shows the simulated DiD estimate of the Francoist street name removal, using the models with control variables.

Table 3: Francoist street name removal and increase in electoral support for parties

	VOX	VOX	PP	PP	PSOE	PSOE
	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	0.056 (0.181)	-1.470** (0.451)	34.151*** (0.462)	54.479*** (0.988)	36.467*** (0.414)	38.104*** (0.977)
Francoist st name removal	-0.016 (0.257)	-0.132 (0.262)	3.018*** (0.658)	1.324* (0.574)	-0.484 (0.590)	-0.024 (0.568)
Election April 2019	12.330*** (0.171)	12.319*** (0.167)	-17.390*** (0.438)	-17.350*** (0.366)	4.259*** (0.392)	4.258*** (0.362)
Removal $\times$ April 2019	0.739* (0.359)	0.724* (0.352)	-1.697+ (0.918)	-1.731* (0.771)	-0.233 (0.823)	-0.243 (0.762)
Controls	No	Yes	No	Yes	No	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,338	2,310	2,338	2,310	2,338	2,310
R <sup>2</sup>	0.756	0.768	0.585	0.703	0.414	0.496
Adjusted R <sup>2</sup>	0.754	0.766	0.582	0.701	0.409	0.491

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Only municipalities that had at least one street with a Francoist name in  $t_0$  were included in the sample.

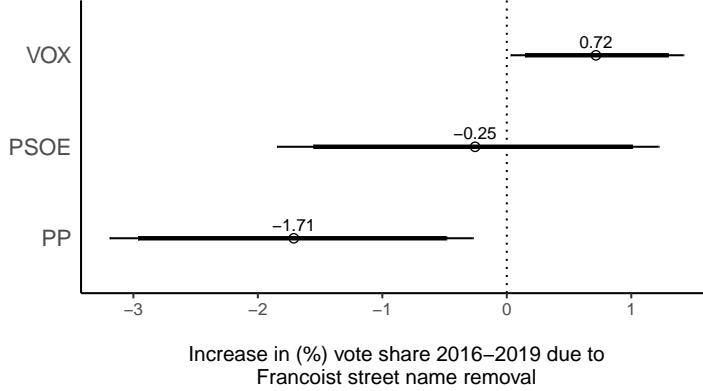


Figure 2: DiD estimates of Francoist street name removal on vote change, obtained from simulations (mean and 90%/95% CIs)

Results support the idea that the changes caused a backlash. On the one hand, in municipalities where Francoist street names were removed, Vox increased its support 0.7 points more. Considering that the nation-wide electoral share of Vox in April 2019 was 10.3%, this effect is significant: the change in electoral support was around 6% higher in these municipalities. On the other hand, the removal of Francoist street names is related to an even higher decrease in electoral support for PP, of almost 1.5 points. However, it did not have any significant effect on electoral support for PSOE, which suggests the change in political preferences took place among rightist individuals. This last result is coherent with the idea that there changes were linked not only to the name removals but to mobilization strategies of the far-right.

The results could be confounded if the removal of Francoist street names was explained by the same factors that also explain a shift to far-right preferences. One possibility is that these street name changes, which took place relatively late, took place in more conservative areas where Spanish nationalism was stronger. In this case, we should see different trends before 2016 between municipalities that later had a change and those that did not. Figure 3 shows normalized electoral trends among control and treated groups for PP and Vox. Even though in the case of Vox we can only go as far back as December 2015 elections, there are no differing trends before 2016 for the two parties for which we find an effect. In the Appendix, we also include more detailed models analyzing the parallel trends assumption for Vox, PP, and PSOE (section A7).

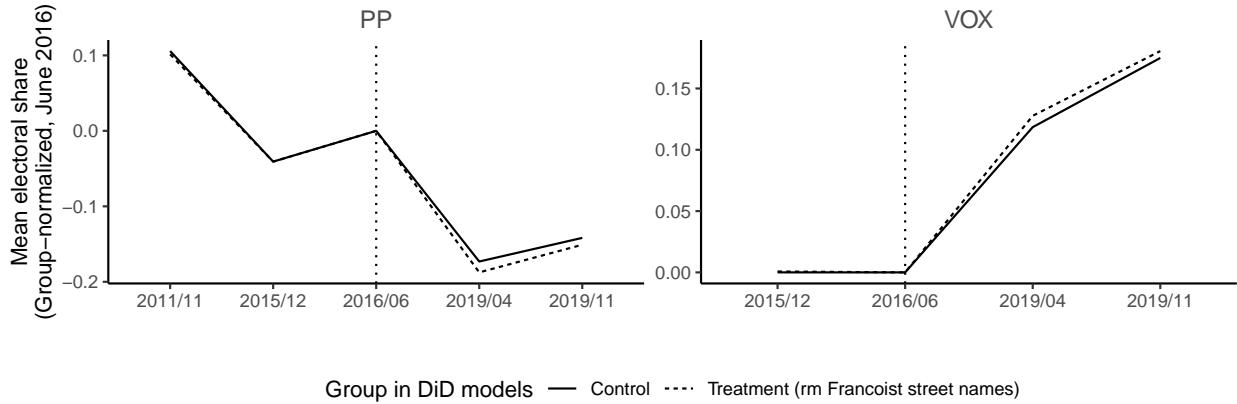


Figure 3: Pre- and post-treatment trends in Vox and PP electoral share

We also include a number of additional analyses in the Appendix. On the one hand, we show cross-sectional models (section A6) using the independent variable in continuous form, tracking Francoist street name removals during different periods (including changes between 2001 and 2019), and using as the dependent variable support for Vox in November 2019 elections as well as the change in support between April and November 2019. Results are coherent with the DiD analyses, and show that Francoist street name removals account for the growth in support between 2016 and 2019 but not for the changes between April and November 2019, which suggests that any local effect due to a backlash over the politics of memory took place prior to April 2019.

On the other hand, we also test the robustness of the DiD analyses to a different specifications (section A7), namely, including the main independent variable in continuous form (logged number of street name removals), restricting the sample to municipalities where Vox had more than 0 votes in 2016, and changing the independent variable so it also registers changes that were registered in the first half of 2019. We also show results from first-difference models (section A8). In every case, results do not change significantly when using alternative specifications and support the main findings.

## Conclusion

In this article, we have explored the political effect of the removal of Francoist street names in Spain. Our results suggest that this policy can cause a backlash. Using local-

level data, we find a short-term positive effect of these changes on the increase in support for the far-right party, Vox, which has recently gained steam with a discourse grounded in an authoritarian and exclusionary version of Spanish nationalism.

The results from our analyses echo recent debates about symbolic TJ policies and memories of past conflicts in other countries. For example, the debate in the United States over the Confederate symbols shows that this type of policies can generate political instability and even spark political violence. In Ukraine, the removal of Soviet monuments has also generated controversy and likely benefited pro-soviet political parties ([Rozenas and Vlasenko, 2021](#)). Our goal is not to take a normative stand against these policies. We believe that, in spite of these short term backlash effects, they can be highly beneficial in the long run (these measures could well contribute to national reconciliation down the road). Moreover, we show that TJ symbolic policies might cause a backlash and have political consequences, as it has been the case of Ukraine or Spain, where some political parties have taken electoral advantage of it. Yet, this backlash should not be not an automatic outcome of these policies and can perhaps be palliated by actions of other political parties. For example, countering narratives or compensating the aggrieved in other ways (i.e., relocating these symbols into a museum) could limit the extent to which extremist or populist parties capitalize their discontentment. The extent to which such remedial policies can work is nonetheless out of the scope of this paper. Finally, while we have found evidence regarding the removal of symbols, other TJ policies might not have to similar backlash effects. For instance, recent research shows that TJ museums can have a positive effect on reconciliation ([Balcells et al., 2020](#)), and that reparations can political engagement among victims ([Voytas, 2021](#)). The overall effect of TJ might depend on the balance between different measures ([Olsen et al., 2010; Loyle and Appel, 2017](#)). Overall, this article contributes to the scholarly debate on the effectiveness of TJ policies, a debate that remains open and will require further research.

## Notes

<sup>1</sup>Vox is a relatively new party which promotes a discourse based on authoritarian conservatism and a hard-line version of Spanish nationalism. It originated in 2013 from a split in the traditional right-wing party (Partido Popular, or PP). It shares with other populist right-wing parties in Europe a nativist ideology and a rejection of immigration, gender policies, and the social welfare state (Turnbull-Dugarte, 2019; Turnbull-Dugarte et al., 2020).

<sup>2</sup>Characterizing the Law of Historical Memory as an instrument of leftist propaganda, Vox campaigned on the national unity of Spain as a way of leaving behind historical divisions and enacted the figure of Francisco Franco as an important political leader who brought peace and stability to the country.

<sup>3</sup>The INE also offers one-time data for June 2001.

<sup>4</sup>The full list is available online at <https://bit.ly/37cLGgk> (accessed 26/11/2020).

<sup>5</sup>See section A3 in the appendix for more details about the binary coding.

<sup>6</sup>Results are available at <http://www.infoelectoral.mir.es/> (accessed 03/12/2020).

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Online Appendix for:  
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June 15, 2021

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## A1 Francoist street names

We considered as Francoist the following street names. The starting point was the list published by the Madrid City Council in 2017, where they proposed a list of 52 street names to be removed, following a report by the Historical Memory Commission.<sup>1</sup> This list was expanded, manually selecting from the street names most commonly changed. Indeed, among all the changes between 2001 and 2020, the five most commonly removed street names were all key Francoist figures: 'Jose Antonio,' 'Calvo Sotelo,' 'General Mola,' 'Generalísimo,' and 'General Franco.' The full list:

18 de Julio; Alcalde Conde de Mayalde; Alcazar; Alcazar de Toledo; Alferez Provisional; Almirante Francisco Moreno; Angel del Alcazar; Arco de la Victoria; Arriba Espana; Aunos; Batalla de Belchite; Batalla del Ebro; Caidos; Caidos (de Los); Caidos (los); Caidos de la Division Azul; Caidos Por la Patria; Calvo Sotelo; Calvo Sotelo (de); Capita Cortes; Capitan Cortes; Capitan Cortes (del); Capitan Haya; Capitan Luna; Carlos Pinilla; Carlos Ruiz; Carrero Blanco; Caudillo; Caudillo (del); Cerro de Garabitas; Cirilo Martin Martin; Comandante Franco; Comandante Franco; Comandante Zorita; Conde Vallellano; Crucero Baleares; Defensores del Alcazar; Defensores del Alcazar; Dieciocho de Julio; Diego Salas Pombo; Division Azul; Doctor Vallejo-Nagera; Eduardo Aunos; Ejercito Espanol; El Algabeno; Emilio Jimenez Millas; Falange Espanola; Federico Mayo; Federico Servet; Fernandez Ladreda; Francisco Franco; Franco; Garcia Morato; General; General Aranda; General Asensio Cabanillas; General Cabanellas; General Cabanellas; General Davila; General Fanjul; General Franco; General Garcia de la Herranz; General Garcia Escamez; General Kirkpatrick; General Millan Astray; General Mola; General Mola (del); General Moscardo; General Munoz Grandes; General Orgaz; General

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<sup>1</sup>The full list and the reasons for the choice of each street name is available online at <https://bit.ly/37cLGgk> (accessed 26/11/2020).

Primo de Rivera; General Queipo de Llano; General Rodrigo; General Romero Basart; General Sagardia Ramos; General Saliquet; General Sanjurjo; General Varela; General Yague; Generalisimo; Generalisimo (del); Generalisimo Franco; Gobernador Carlos Ruiz; Hermanos Falco y Alvarez de Toledo; Hermanos Garcia Noblejas; Heroes del Alcazar; Jose Antonio; Jose Antonio (de); Jose Antonio Giron; Jose Antonio Giron; Jose Antonio Primo de Rivera; Jose Luis de Arrese; Jose Maria Peman; Juan Pujol; Juan Vigon; Lepanto; Los Martires; Manuel Sarrion; Martires; Martires (los); Matias Montero; Millan Astray; Munoz Grandes; Onesimo Redondo; Pilar Primo de Rivera; Primero de Octubre; Primo de Rivera; Puerto de los Leones; Queipo de Llano; Ramiro Ledesma; Ramon Franco; Ruiz de Alda; Salas Pombo; Veintiocho de Marzo

## A2 Descriptives

Table 1 shows the summary statistics for the sample included in the main DiD analyses. Figure 1 shows a map of the municipalities included in these analyses, excluding municipalities where Vox did not participate in 2016. Figure 2 shows a map of all the municipalities that still had Francoist street names in June 2016, that is, the full sample used included in the robustness checks for PP and PSOE.

Table 1: Summary statistics for the covariates

Variable	Min	Q1	Median	Mean	Q3	Max
Vox April 2019	0	0.09	0.12	0.13	0.16	0.41
Vox June 2016	0	0	0	0	0	0.05
PP April 2019	0.03	0.18	0.23	0.25	0.3	0.77
PP June 2016	0.07	0.34	0.41	0.42	0.5	0.94
PSOE April 2019	0	0.26	0.32	0.33	0.4	0.68
PSOE June 2016	0	0.21	0.27	0.29	0.36	0.64
Francoist st name removal, 2016-2018	0	0	0	0.35	1	1
Log. Francoist streets, June 2016	0.69	0.69	0.69	0.98	1.1	4.11
Turnout April 2019	0.44	0.74	0.77	0.77	0.81	0.97
Turnout June 2016	0.5	0.7	0.73	0.73	0.77	1
Log. Population 2011	2.83	6.25	7.63	7.74	9.19	14.98
Leftist mayor 2015	0	0	0	0.49	1	1
Unemployment 2016	0	0.06	0.08	0.08	0.11	0.21

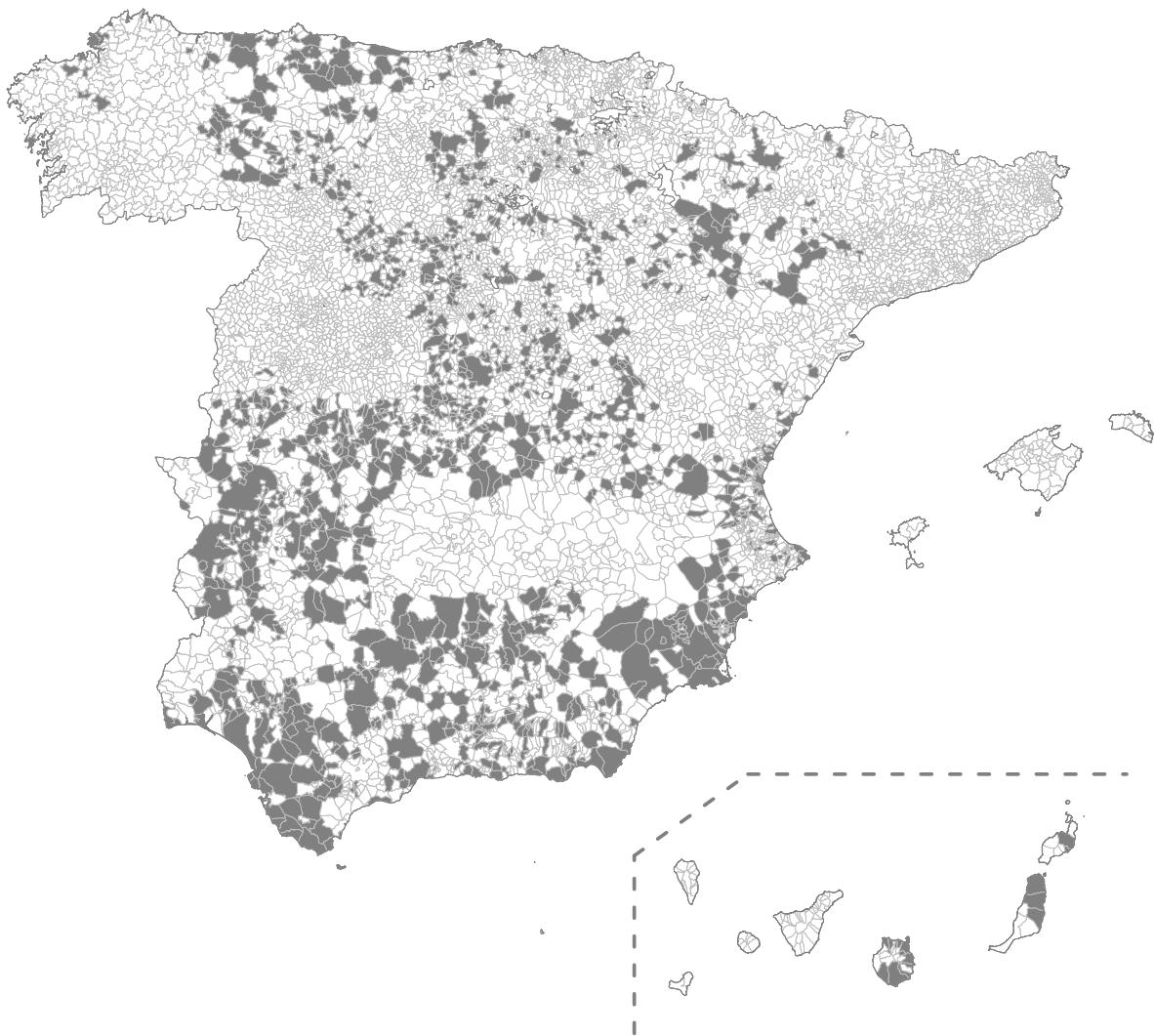


Figure 1: Municipalities included in the main DiD analyses



Figure 2: Municipalities included in the DiD analyses with full sample (PP and PSOE)

### A3 DiD sample and treatment strength

Figure 3 shows the treatment strength (i.e. the number of Francoist name removals) depending on the number of streets with Francoist names in June 2016. Because of scale problems, the city of Madrid was removed from the graph, even though it follows a similar pattern: Madrid had 60 streets with Francoist names in mid 2016, and removed 52 of those during the period. The graph shows that most streets had very few streets in 2016 and removed those (usually 1 or 2), while a small subset had more streets and removed either all or part of them.

Figure 4 shows the distribution of remaining streets with Francoist names on January 1st, 2019, among those municipalities that were classified as treated in the analyses. Most municipalities that were treated between mid 2016 and late 2018 removed all their streets with Francoist names, and only a small minority retained a small number of Francoist streets (mostly one or two).

In many cases, differences in treatment strength—and the fact that there were remaining Francoist streets names after this period—is due to the fact that the list of Francoist names we use (list in previous section A1) is very comprehensive: many municipalities likely removed the most famous and relevant Francoist names, which arguably were the ones most likely to produce some kind of effect on local political preferences.

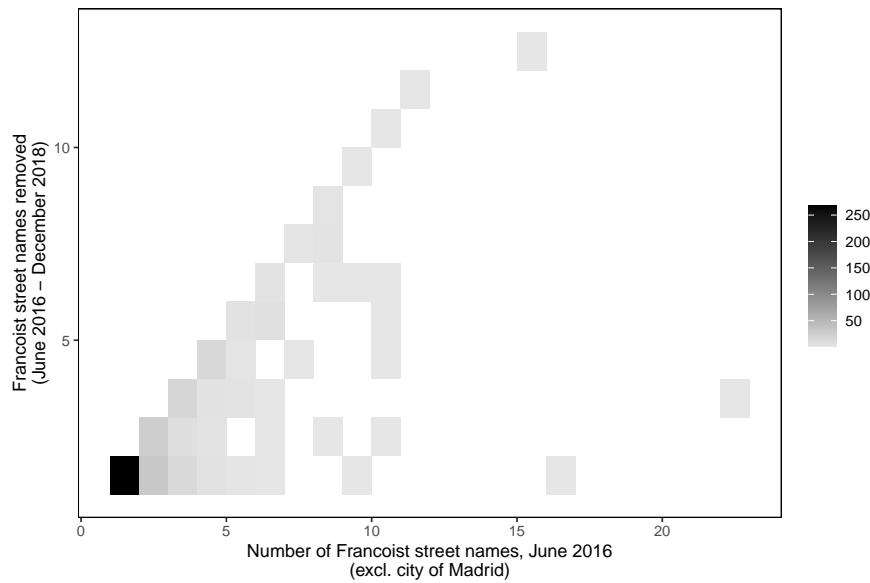


Figure 3: Treatment strength among the treated

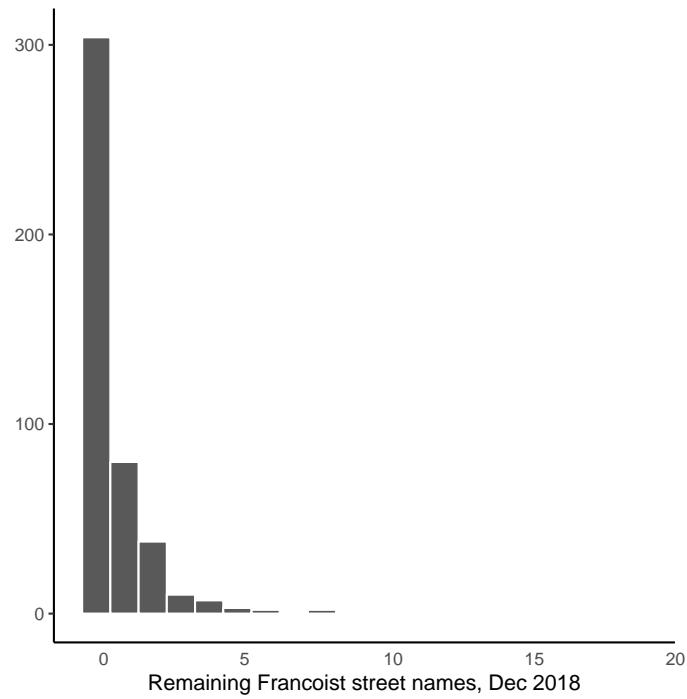


Figure 4: Remaining Francoist streets on treated municipalities 'after treatment'

## A4 Descriptives on Francoist street name removals

Figure 5 shows the number of Francoist street name removals by province in three different time periods: 2001–2020, 2011–2016, and 2016–2018. Figure 6 shows the share of Francoist street by province at three different points in time: June 2001, January 2010, and June 2016. A quick look shows that provinces that removed more Francoist streets during the whole available period are similar to those that removed more Francoist names between 2016 and 2019, which are also provinces that had a higher share of Francoist streets in 2001. These are mostly provinces in central Spain, where Francoist streets were not removed earlier on either because of inertia or ideological opposition, as discussed in the main text.

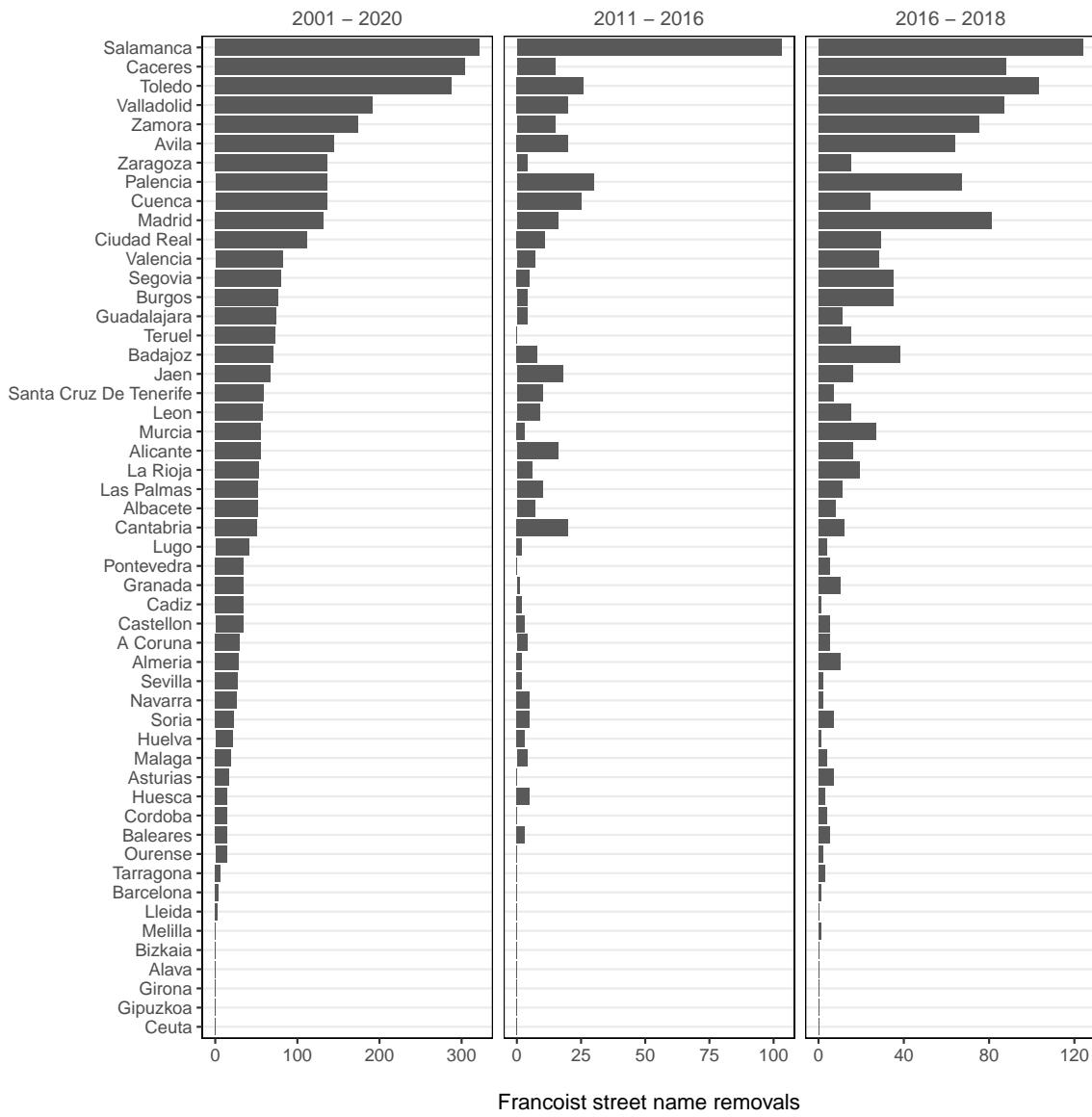


Figure 5: Number of Francoist street name removals over time

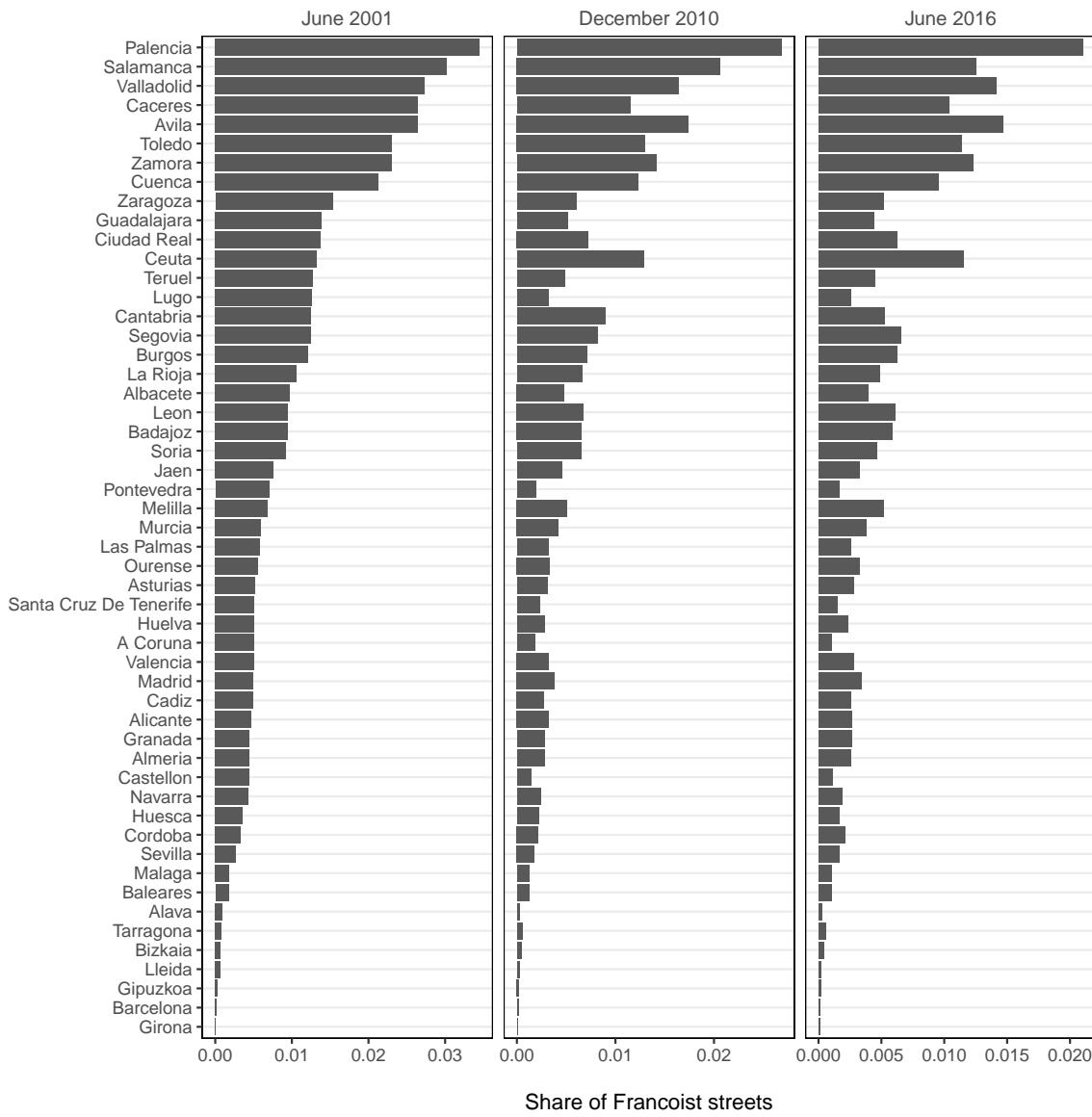


Figure 6: Share of Francoist streets in each province

## A5 Comparing treated vs control and sample vs out-of-sample

One of the main concerns of the main analyses is that treated and control municipalities in the difference-in-differences analyses are not comparable. To assess empirical evidence on this problem, table 2 shows the results of regressing a binary indicator of Francoist street name removal between 2016 and 2018 (the period covered in the DiD analyses in the main text) on a set of explanatory variable. The sample only includes those municipalities that still had Francoist streets in June 2016.

Table 2: Logit regression on Francoist street name removal (2016–2018)

	(1)	(2)	(3)
(Intercept)	0.326*** (0.044)	0.150* (0.062)	-0.289 (0.206)
Leftist mayor 2015	-0.008 (0.021)	0.021 (0.022)	0.024 (0.026)
Log. Population 2011	-0.051*** (0.005)	-0.038*** (0.006)	-0.030*** (0.008)
Log. No. Francoist streets June 2016	0.339*** (0.023)	0.328*** (0.024)	0.342*** (0.027)
PP support, June 2016			0.159 (0.130)
Vox support, June 2016			-2.861 (3.558)
Turnout, June 2016			0.438+ (0.229)
CCAA Fixed Effects	No	Yes	Yes
Observations	1,636	1,636	1,167
Log Likelihood	-867.939	-841.697	-523.509
Akaike Inf. Crit.	1,743.879	1,727.394	1,091.019

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Only including municipalities that had at least one street with Francoist names in June 2016.

The picture that emerges from these analyses is that it was mainly smaller municipalities with a high number of Francoist streets at the beginning of the period the ones that were more likely to remove Francoist street names. Interestingly, neither

the election of a leftist mayor in 2015 nor electoral support for Vox and PP in June 2016 elections show any significant relationship with being assigned into treatment.

Moreover, following figures 5 and 6, these municipalities were located mostly in the center of Spain. These results are in line with the idea that municipalities that still had and changed street names during this period were probably the ones that had not done so because of political inaction and that, if anything, the selection bias goes against our main hypothesis.

The core idea of the selection bias is that the sample, because of still having Francoist street names as late as 2016, should be relatively more rightist than the overall sample of Spanish municipalities. Table 3 shows the results of t-tests between municipalities in and out of the sample (i.e. having any Francoist street name in June 2016) on electoral share for PP, PSOE, and Vox in all elections between 2011 and 2019. Interestingly, the data shows that although support for rightist parties was stronger among municipalities that still had Francoist street names in June 2016, support for the center-left PSOE was higher as well. Probably, this is due to the fact that the sample is more likely to include municipalities in the central regions in Spain compared to peripheral regions, where the main two parties (PP and PSOE) have much less support (particularly in Catalonia and the Basque Country).

In order to check this, table 4 shows results of logistic regression of electoral support for PP and PSOE on being in the sample (having Francoist street names in June 2016), including CCAA fixed effects and controlling for population. In this case, the results are much more clear: municipalities in the sample show higher levels of electoral support for the right-wing PP.

Going further back in time, table 5 and table 6 repeat these analyses but distinguishing between municipalities that had or did not have Francoist street names in June 2001, the earliest point in time for which we have available data. Moreover, we use data on all elections since 2000. Again, the same patterns emerge. Municipalities that had Francoist street names in later periods were more, on average, more rightist, or at least supported PP stronger.

Table 3: Mean comparison municipalities in/out of sample (with/without Francoist street names in June 2016)

Party	In sample	Out of sample	Diff	P-value
April 2019				
PP	26.72%	23.95%	2.77	0.000***
PSOE	31.72%	28.04%	3.68	0.000***
VOX	12.31%	9.33%	2.97	0.000***
June 2016				
PP	44.42%	38.49%	5.94	0.000***
PSOE	27.21%	23.13%	4.08	0.000***
VOX	0.21%	0.2%	0.01	0.650
December 2015				
PP	40.34%	35.26%	5.08	0.000***
PSOE	27.86%	23.26%	4.6	0.000***
VOX	0.23%	0.22%	0	0.796
November 2011				
PP	54.87%	47.07%	7.8	0.000***
PSOE	31.23%	28.01%	3.23	0.000***

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Table 4: Voting for PP/PSOE and having a Francoist street name in June 2016

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	-0.208*** (0.048)	-0.183*** (0.049)	-0.179*** (0.049)	-0.246*** (0.048)	-0.268*** (0.042)	-0.248*** (0.044)
PP (2000/03)	0.126* (0.052)					
PSOE (2000/03)	-0.149** (0.053)					
PP (2004/03)		0.128* (0.054)				
PSOE (2004/03)		-0.200*** (0.055)				
PP (2008/03)			0.131* (0.056)			
PSOE (2008/03)			-0.197*** (0.055)			
PP (2011/11)				0.212*** (0.051)		
PSOE (2011/11)				-0.157** (0.056)		
PP (2015/12)					0.263*** (0.045)	
PSOE (2015/12)					-0.138** (0.054)	
PP (2016/06)						0.237*** (0.046)
PSOE (2016/06)						-0.175** (0.057)
Log. Pop 2011	0.073*** (0.003)	0.076*** (0.003)	0.074*** (0.003)	0.072*** (0.003)	0.075*** (0.003)	0.074*** (0.003)
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,593	7,890	7,893	7,897	7,897	7,897
Akaike Inf. Crit.	6,625.822	6,839.057	6,837.529	6,829.387	6,830.442	6,827.124

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Table 5: Mean comparison municipalities with/without Francoist street names in June 2001

Party	In sample	Out of sample	Diff	P-value
April 2019				
PP	27.23%	23.47%	3.75	0.000***
PSOE	31.53%	27.75%	3.77	0.000***
VOX	12.22%	9.08%	3.15	0.000***
June 2016				
PP	44.85%	37.74%	7.11	0.000***
PSOE	26.9%	22.86%	4.04	0.000***
VOX	0.21%	0.2%	0.02	0.278
December 2015				
PP	40.85%	34.57%	6.28	0.000***
PSOE	27.5%	22.95%	4.55	0.000***
VOX	0.24%	0.22%	0.02	0.260
November 2011				
PP	55.17%	46.2%	8.96	0.000***
PSOE	31%	27.78%	3.21	0.000***
March 2008				
PP	48.65%	41.07%	7.58	0.000***
PSOE	42.99%	39.63%	3.37	0.000***
March 2004				
PP	48.49%	41.57%	6.92	0.000***
PSOE	42.09%	36.68%	5.41	0.000***
March 2000				
PP	53.18%	46.81%	6.37	0.000***
PSOE	36.21%	31.46%	4.74	0.000***

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Table 6: Voting for PP/PSOE and having a Francoist street name in June 2001

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	-0.269*** (0.052)	-0.252*** (0.053)	-0.231*** (0.054)	-0.338*** (0.053)	-0.328*** (0.047)	-0.305*** (0.048)
PP (2000/03)	0.234*** (0.056)					
PSOE (2000/03)	-0.083 (0.058)					
PP (2004/03)		0.239*** (0.059)				
PSOE (2004/03)		-0.125* (0.061)				
PP (2008/03)			0.205*** (0.061)			
PSOE (2008/03)			-0.126* (0.061)			
PP (2011/11)				0.340*** (0.056)		
PSOE (2011/11)				-0.047 (0.062)		
PP (2015/12)					0.358*** (0.050)	
PSOE (2015/12)					-0.066 (0.059)	
PP (2016/06)						0.327*** (0.051)
PSOE (2016/06)						-0.105+ (0.063)
Log. Pop 2011	0.078*** (0.003)	0.081*** (0.003)	0.079*** (0.003)	0.077*** (0.003)	0.082*** (0.003)	0.080*** (0.003)
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,593	7,890	7,893	7,897	7,897	7,897
Akaike Inf. Crit.	8,001.884	8,353.067	8,365.240	8,343.314	8,342.123	8,342.252

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

## A6 Cross-sectional analysis

Table 7 shows the basic cross-sectional results, using both binary and continuous versions of the main independent variable, which tracks the removal of Francoist street names for since the oldest data available (June 2001) to December 2018. Table 8 shows the results of cross-sectional analyses similar to the ones in the previous table but using the change in support for Vox between April and November 2019 as the dependent variable. These results that any effect of the removal of Francoist streets took place between the April 2019 elections.

Table 7: Francoist street name removal and electoral support for Vox

	Apr 2019 (1)	Nov 2019 (2)	Apr 2019 (3)	Nov 2019 (4)
(Intercept)	0.120*** (0.018)	0.213*** (0.020)	0.119*** (0.018)	0.211*** (0.020)
Francoist street name removal (log. no)	0.003+ (0.002)	0.005** (0.002)		
Francoist street name removal (dummy)			0.005* (0.002)	0.008** (0.003)
Unemployment 2019	0.042 (0.047)	0.139* (0.058)	0.043 (0.047)	0.141* (0.058)
Turnout April 2019	-0.020 (0.020)		-0.020 (0.020)	
Turnout Nov 2019		-0.086*** (0.023)		-0.086*** (0.023)
Log. Population	0.001+ (0.001)	0.003*** (0.001)	0.002* (0.001)	0.003*** (0.001)
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	2,164	2,165	2,164	2,165
R <sup>2</sup>	0.291	0.317	0.292	0.318
Adjusted R <sup>2</sup>	0.283	0.310	0.284	0.311

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names between June 2001 and December 2018. Models 3 and 4 only include municipalities that had Francoist street names in June 2001.

Table 8: Francoist street name removal and change in electoral support for Vox during 2019

	Full sample	Limited sample
	(1)	(2)
(Intercept)	2.195*** (0.119)	2.362*** (0.156)
Francoist street name removal	-0.015 (0.020)	0.003 (0.019)
Unemployment 2019	0.518 (0.337)	0.450 (0.404)
Turnout April 2019	-0.623*** (0.133)	-0.799*** (0.178)
Turnout Nov 2019	-0.009+ (0.005)	-0.018** (0.006)
CCAA Fixed Effects	Yes	Yes
Observations	7,552	2,153
R <sup>2</sup>	0.078	0.134
Adjusted R <sup>2</sup>	0.075	0.125

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

The main independent variable refers to the removal of Francoist street names between June 2001 and December 2018. The limited sample corresponds to municipalities that had Francoist street names in June 2001.

Tables 9 and 10 replicate the analyses in the main text—plus the model using the change between April and November as dependent variable—using as independent variable the removal of Francoist streets between 2011 and 2018, using the full and limited samples, respectively. Results point in the same direction as the cross-sectional models in the main text, that is, the removal of Francoist street names is correlated with the increase in support for Vox between 2016 and 2019.

Table 9: Electoral support for Vox and Francoist street name removal (2011–2018)

	Apr 2019	Nov 2019	Change
	(1)	(2)	(3)
(Intercept)	0.078*** (0.009)	0.145*** (0.010)	2.197*** (0.119)
Francoist street name removal	0.010*** (0.002)	0.013*** (0.002)	-0.011 (0.026)
Unemployment 2019	0.083*** (0.025)	0.195*** (0.031)	0.517 (0.337)
Turnout April 2019	0.005 (0.010)		-0.623*** (0.133)
Turnout Nov 2019		-0.037*** (0.011)	
Log. Population	0.003*** (0.000)	0.006*** (0.000)	-0.009+ (0.005)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	7,819	7,820	7,552
R <sup>2</sup>	0.441	0.499	0.078
Adjusted R <sup>2</sup>	0.440	0.497	0.075

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names between December 2010 and December 2018.

Finally, for comparison, table 11 repeats the cross-sectional analyses but including the main independent variable (the removal of Francoist street names) for different periods, using support for Vox as our dependent variable. In particular, we include street name removals between 2001 and 2015 (*before* our study period), 2001 and 2018 (full period), 2011 and 2018, and 2016 and 2018 (same period as in the main analyses). We only include municipalities that had Francoist street names at

Table 10: Electoral support for Vox and Francoist street name removal (2011–2018), limited sample

	Apr 2019 (1)	Nov 2019 (2)	Change (3)
(Intercept)	0.115*** (0.020)	0.218*** (0.022)	2.476*** (0.174)
Francoist street name removal	0.006* (0.002)	0.007* (0.003)	-0.012 (0.022)
Unemployment 2019	0.002 (0.051)	0.097 (0.062)	0.381 (0.443)
Turnout April 2019	-0.012 (0.023)		-0.901*** (0.200)
Turnout Nov 2019		-0.088*** (0.025)	
Log. Population	0.002* (0.001)	0.003*** (0.001)	-0.023** (0.007)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	1,791	1,792	1,782
R <sup>2</sup>	0.269	0.296	0.129
Adjusted R <sup>2</sup>	0.260	0.287	0.118

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names between December 2010 and December 2018. Only municipalities that had Francoist street names in December 2010 were included.

the beginning of each period. The results show that the removal of Francoist street names only has a significant correlation with support for Vox when recent name removals are included, i.e., when the independent variable includes removals in 2016 and after.

Table 11: Electoral support for Vox in 2019 and Francoist street name removal across different periods

	2001-2015	2001-2018	2011-2018	2016-2018
	(1)	(2)	(3)	(4)
(Intercept)	0.120*** (0.018)	0.119*** (0.018)	0.115*** (0.020)	0.118*** (0.021)
Francoist street name removal	0.003 (0.002)	0.005* (0.002)	0.006* (0.002)	0.007* (0.003)
Unemployment 2019	0.045 (0.047)	0.043 (0.047)	0.002 (0.051)	-0.031 (0.053)
Turnout April 2019	-0.020 (0.021)	-0.020 (0.020)	-0.012 (0.023)	-0.020 (0.024)
Log. Population	0.001+ (0.001)	0.002* (0.001)	0.002* (0.001)	0.003** (0.001)
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	2,164	2,164	1,791	1,611
R <sup>2</sup>	0.290	0.292	0.269	0.264
Adjusted R <sup>2</sup>	0.283	0.284	0.260	0.254

*Note:* + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names in different periods: 1) June 2001 - December 2015, 2) June 2001 - December 2018, 3) December 2010 - December 2018, and 4) June 2016 - December 2018. Only municipalities that had Francoist street names at the beginning of each period were included.

## A7 Robustness tests (difference-in-differences)

Table 12 shows the robustness tests for the DiD analyses using electoral support for Vox as the dependent variable, while tables 13 and 14 do the same but using PP and PSOE share, respectively, as the dependent variable. All models in these tables include elections before June 2016: December 2015 in the case of Vox, and all elections since March 2000 for PP and PSOE. Model 2 extends the dependent variable to the first half of 2019, accounting for potential delays in the registration of name changes that could have affected electoral support in April 2019. Model 3 uses the independent variable in continuous form, namely, the logged number of street name removals. Model 4 restricts the sample to municipalities where Vox got more than 0 votes in 2016 elections, to account for potential estimation issues.

The two main takeaways from these results is that the main result does not change across the different specifications and that the parallel trend assumption holds. In the case of Vox, the pre-treatment DiD estimate (December 2015) does not show any statistical significance, while in the case of PP none of the DiD estimates between March 2000 and December 2015 in any of the models is significant either. In the PSOE models, it seems that municipalities that later removed Francoist names showed more support for the PSOE in earlier elections (November 2011 and December 2015), but this result is not robust across all specifications.

Finally, table 15 repeats the main analyses for PP and Vox using normal standard errors, heteroskedasticity-consistent standard errors, and standard errors clustered at the level of municipalities. Although levels of significance go down in the case of Vox, it still retain statistical significance and, in the case of PP, significance increases.

Table 12: Francoist street name removal and increase in electoral support for Vox

	(1)	(2)	(3)	(4)
(Intercept)	-0.968** (0.326)	-0.969** (0.326)	-0.929** (0.324)	0.127 (0.399)
Francoist street name removal	-0.078 (0.220)	-0.066 (0.215)	-0.163 (0.188)	-0.231 (0.253)
Election December 2015	-0.101 (0.148)	-0.102 (0.149)	-0.109 (0.144)	-0.119 (0.159)
Election April 2019	12.319*** (0.142)	12.305*** (0.144)	12.300*** (0.139)	12.898*** (0.153)
Francoist removal $\times$ Dec 2015	-0.019 (0.314)	-0.011 (0.306)	0.021 (0.253)	-0.048 (0.362)
Francoist removal $\times$ April 2019	0.724* (0.299)	0.735* (0.293)	0.746** (0.244)	0.789* (0.347)
Controls	Yes	Yes	Yes	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	3,303	3,303	3,303	2,259
R <sup>2</sup>	0.802	0.802	0.802	0.844
Adjusted R <sup>2</sup>	0.801	0.801	0.801	0.843

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . All models also include elections before June 2016 (December 2015). Model 2 extends the DV (name removal) to the first half of 2019. Model 3 uses the IV in continuous form (logged number of changes). Model 4 restricts the sample to municipalities where Vox got more than 0 votes. Controls include a dummy for a leftist major elected in 2015 local elections, logged population in 2011, logged number of Francoist streets in  $t_0$ , and the unemployment rate in January 2016. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table 13: Francoist street name removal and increase in electoral support for PP

	(1)	(2)	(3)	(4)
(Intercept)	49.323*** (0.593)	49.312*** (0.594)	49.484*** (0.589)	43.384*** (0.751)
Francoist street name removal	1.009* (0.511)	0.974+ (0.502)	0.841+ (0.436)	0.634 (0.695)
Election March 2000	8.091*** (0.374)	8.015*** (0.379)	8.132*** (0.363)	8.539*** (0.428)
Election March 2004	3.291*** (0.374)	3.273*** (0.379)	3.310*** (0.363)	3.614*** (0.428)
Election March 2008	4.267*** (0.374)	4.264*** (0.379)	4.218*** (0.363)	6.074*** (0.428)
Election November 2011	10.569*** (0.374)	10.561*** (0.379)	10.538*** (0.363)	12.127*** (0.428)
Election December 2015	-4.075*** (0.374)	-4.063*** (0.379)	-4.039*** (0.363)	-4.218*** (0.428)
Election April 2019	-17.382*** (0.376)	-17.343*** (0.381)	-17.379*** (0.364)	-17.657*** (0.428)
Francoist removal × March 2000	-0.106 (0.711)	0.161 (0.698)	-0.241 (0.594)	0.132 (0.970)
Francoist removal × March 2004	0.741 (0.711)	0.754 (0.697)	0.634 (0.594)	0.674 (0.970)
Francoist removal × March 2008	-0.631 (0.711)	-0.581 (0.697)	-0.430 (0.594)	-0.087 (0.970)
Francoist removal × Nov 2011	-0.425 (0.711)	-0.369 (0.697)	-0.295 (0.594)	0.040 (0.970)
Francoist removal × Dec 2015	-0.007 (0.711)	-0.049 (0.697)	-0.132 (0.594)	-0.158 (0.970)
Francoist removal × April 2019	-1.422* (0.712)	-1.466* (0.699)	-1.352* (0.594)	-1.781+ (0.970)
Controls	Yes	Yes	Yes	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	11,325	11,325	11,325	5,502
R <sup>2</sup>	0.683	0.683	0.683	0.718
Adjusted R <sup>2</sup>	0.682	0.682	0.682	0.717

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . All models also include elections before June 2016 (2000–2015). Model 2 extends the DV (name removal) to the first half of 2019. Model 3 uses the IV in continuous form (logged number of changes). Model 4 restricts the sample to municipalities where Vox got more than 0 votes. Controls include a dummy for a leftist major elected in 2015 local elections, logged population in 2011, logged number of Francoist streets in  $t_0$ , and the unemployment rate in January 2016. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table 14: Francoist street name removal and increase in electoral support for PSOE

	(1)	(2)	(3)	(4)
(Intercept)	43.175*** (0.562)	43.245*** (0.564)	43.096*** (0.559)	51.206*** (0.705)
Francoist street name removal	-0.564 (0.490)	-0.786 (0.481)	-0.037 (0.415)	0.310 (0.654)
Election March 2000	6.449*** (0.357)	6.420*** (0.361)	6.456*** (0.346)	7.318*** (0.403)
Election March 2004	6.890*** (0.357)	6.827*** (0.361)	6.943*** (0.346)	6.638*** (0.403)
Election March 2008	-5.501*** (0.357)	-5.565*** (0.361)	-5.396*** (0.346)	-6.722*** (0.403)
Election November 2011	-9.073*** (0.357)	-9.160*** (0.361)	-9.044*** (0.346)	-10.212*** (0.403)
Election December 2015	-9.755*** (0.357)	-9.839*** (0.361)	-9.682*** (0.346)	-10.713*** (0.403)
Election April 2019	-5.127*** (0.357)	-5.184*** (0.361)	-5.066*** (0.346)	-6.637*** (0.403)
Francoist removal × March 2000	-1.026 (0.677)	-0.863 (0.664)	-0.994+ (0.563)	-1.004 (0.911)
Francoist removal × March 2004	-0.477 (0.677)	-0.232 (0.664)	-0.632 (0.563)	-0.737 (0.911)
Francoist removal × March 2008	0.402 (0.677)	0.595 (0.664)	0.021 (0.563)	-0.208 (0.911)
Francoist removal × Nov 2011	1.120+ (0.677)	1.344* (0.664)	0.959+ (0.563)	0.418 (0.911)
Francoist removal × Dec 2015	1.234+ (0.677)	1.443* (0.664)	0.916 (0.563)	0.158 (0.911)
Francoist removal × April 2019	0.801 (0.677)	0.946 (0.664)	0.551 (0.563)	0.139 (0.911)
Controls	Yes	Yes	Yes	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	11,300	11,300	11,300	5,493
R <sup>2</sup>	0.572	0.572	0.572	0.671
Adjusted R <sup>2</sup>	0.570	0.570	0.570	0.669

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . All models also include elections before June 2016 (2000–2015). Model 2 extends the DV (name removal) to the first half of 2019. Model 3 uses the IV in continuous form (logged number of changes). Model 4 restricts the sample to municipalities where Vox got more than 0 votes. Controls include a dummy for a leftist major elected in 2015 local elections, logged population in 2011, logged number of Francoist streets in  $t_0$ , and the unemployment rate in January 2016. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table 15: Main models using conventional, robust or clustered SE

	VOX (1)	PP (2)	VOX Het. Robust SE (3)	PP (4)	VOX Clustered SE (5)	PP (6)
(Intercept)	-1.470** (0.451)	54.479*** (0.988)	-1.470*** (0.434)	54.479*** (1.121)	-1.470*** (0.432)	54.479*** (1.466)
Francoist st name removal	-0.132 (0.262)	1.324* (0.574)	-0.132 (0.128)	1.324* (0.633)	-0.132 (0.129)	1.324* (0.665)
Election April 2019	12.319*** (0.167)	-17.350*** (0.366)	12.319*** (0.160)	-17.350*** (0.361)	12.319*** (0.171)	-17.350*** (0.188)
Removal × April 2019	0.724* (0.352)	-1.731* (0.771)	0.724+ (0.381)	-1.731* (0.782)	0.724+ (0.403)	-1.731*** (0.431)
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,310	2,310	2,310	2,310	2,310	2,310
R <sup>2</sup>	0.768	0.703	0.768	0.703	0.768	0.703
Adjusted R <sup>2</sup>	0.766	0.701	0.766	0.701	0.766	0.701

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Clustered SE at the level of municipalities.

## A8 First-difference models

Tables 16 and 17 show first-difference models on the change in electoral support for Vox and PP, respectively, across the three most recent electoral periods and the ones in which Vox participated: between December 2015 and June 2016, June 2016 to April 2019, and April 2019 to November 2019. The results are coherent with the main findings: we only find a significant relationship between the removal of Francoist street names and change in electoral support during the 2016–2019 period, which is positive for Vox (and similar to the main DiD estimate) and negative for PP, even though it only reaches a 90% level of significant in the latter case.

Table 16: First differences model on change in support for Vox

	2015-2016	2016-2019	2019-2019
	(1)	(2)	(3)
(Intercept)	-0.000 (0.000)	0.122*** (0.003)	0.072*** (0.002)
Francoist street name removal	-0.000 (0.000)	0.007* (0.003)	0.001 (0.002)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	1,001	1,169	1,638
R <sup>2</sup>	0.008	0.211	0.158
Adjusted R <sup>2</sup>	-0.005	0.200	0.148

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . The dependent variable refers to the change in support for Vox ( $t_1 - t_0$ ) in each of the three periods. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table 17: First differences model on change in support for PP

	2015-2016	2016-2019	2019-2019
	(1)	(2)	(3)
(Intercept)	0.037*** (0.002)	-0.146*** (0.003)	0.022*** (0.002)
Francoist street name removal	-0.001 (0.002)	-0.006 <sup>+</sup> (0.003)	0.001 (0.002)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	1,638	1,619	1,619
R <sup>2</sup>	0.049	0.179	0.058
Adjusted R <sup>2</sup>	0.038	0.170	0.047

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . The dependent variable refers to the change in support for PP ( $t_1 - t_0$ ) in each of the three periods. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.